

Customer No.: 31561  
Application No.: 10/711,540  
Docket No.: 13365-US-PA

### **REMARKS**

#### **Present Status of the Application**

The Office Action rejected claims 25 and 28-29 under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Glenn et al. (U.S. Patent No. 6,117,705; hereinafter *Glenn*). The Office Action also rejected claims 30-34 under 35 U.S.C. 103(a) as being unpatentable over *Glenn*. Applicants have amended claim 1 to more explicitly describe the claimed invention.

#### **Interview Summary**

The undersigned would like to thank Examiner Nguyen for granting a telephonic interview on August 7, 2007, during which the 35 U.S.C. 102(b) rejections by Glenn was discussed. More specifically, the undersigned and the Examiner discussed that Glenn fails to teach or suggest "an end of each of the wires connected with the active surface of the chip is covered by the polymer and the other end of each of the wires connected with the carrier is exposed outside of the polymer". After the discussion, an agreement was reached that amending the claims to recite "the other end of each of the wires connected with the carrier is exposed outside of the polymer" define over the existing prior art Glenn.

#### **Discussion of Office Action Rejections**

1. The Office Action rejected claims 25 and 28-29 under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Glenn*.

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In response thereto, Applicants respectfully traverse the rejections for at least the reasons set forth below.

Independent claim 25 recites the features as follows:

25. A chip with polymer thereon, comprising at least:  
a chip having an active surface;  
a polymer, disposed at periphery of the active surface of the chip extending to sidewalls of the chip; and  
a plurality of wires electrically connecting the chip and a carrier for carrying the chip, wherein an end of each of the wires connected with the active surface of the chip is covered by the polymer and the other end of each of the wires connected with the carrier is exposed outside of the polymer.

*(Emphasis added)*

Claims 28-29 and 31-34 recite similar features as set forth in claim 25.

In re U.S. Publication No. 2003/0103339, *Glenn* fails to disclose that "an end of each of the wires connected with the active surface of the chip is covered by the polymer and the other end of each of the wires connected with the carrier is exposed outside of the polymer". Specifically, *Glenn* teaches in FIG. 7 the bead 320 completely envelops the bond wire 208, *Glenn* does not teach in FIG. 6, the other end of the wires connected with the carrier is exposed outside of the polymer. FIG. 6 is an enlarged view of an exemplary conductive connection between a first end portion 216 of a bond wire 208 and a bonding pad 103 of the die 100. The other end portion of the bond wire 208, which is not illustrated in FIG. 6 but is illustrated in FIG. 5, is connected to the metallization 204 on the substrate 200, which is covered by the bead 310 configured beside the sidewalls of the chip. Therefore, *Glenn* fails to teach or suggest covering one end of the wire while exposing the other end of the wire connected the carrier and the 102(b) rejection of claims

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25 and 28-29 should be withdrawn. When the end of each wire connected with the active surface of the chip is covered by the polymer, the low-K peeling problem described in paragraphs [0007]-[0008] of the present application can be effectively reduced. Therefore, the claimed invention is non-obvious for one ordinary skilled in the art, since Glenn fails to teach or suggest the bead 310 shown in figure 6 can solve the low-K peeling problem occur at the periphery of the active surface of the chip.

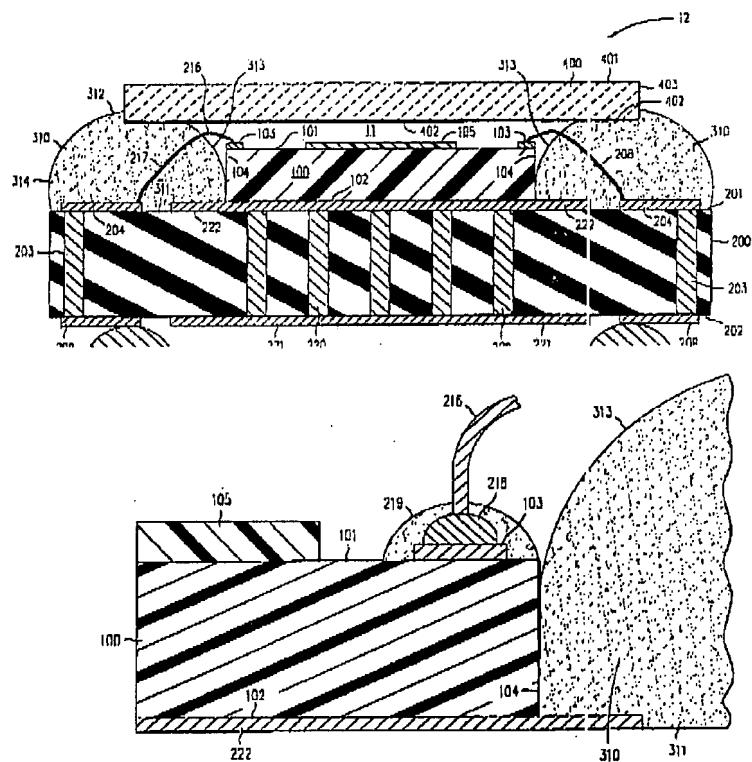


FIG. 6

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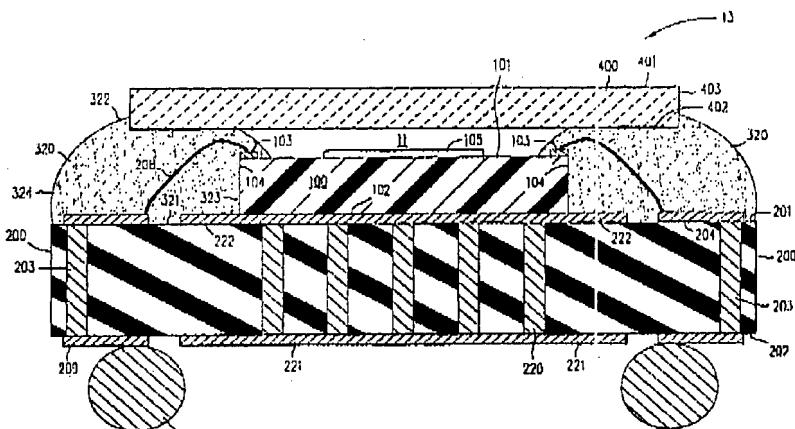


FIG. 7

2. The Office Action also rejected claims 30-34 under 35 U.S.C. 103(a) as being unpatentable over *Glenn*. In response thereto, Applicants respectfully traverse the rejections for at least the reasons set forth below.

In re U.S. Patent No. 6,117,705, Glenn fails to disclose that "an end of each of the wires connected with the active surface of the chip is covered by the polymer and the other end of each of the wires connected with the carrier is exposed outside of the polymer" and claims 30-34 should be novel and non-obvious.

For at least the foregoing reasons, Applicant respectfully submits that all presently pending claims 25 and 28-34 patently define over the prior art references, and should be allowed.

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**CONCLUSION**

For at least the foregoing reasons, it is believed that the pending claims 25 and 28-34 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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